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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,865	07/23/2001	Shuichi Kagawa	2257-0193P-SP	1245

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EXAMINER	
NGUYEN, KEVIN M	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/909,865	KAGAWA ET AL.	
	Examiner	Art Unit	
	Kevin M. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/25/2004 has been entered. An action on the RCE follows:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hino (US 5,956,015).

As to claims 1, 21, Hino teaches an image display device (the CRT display 22, fig. 4) comprising

[recited in lines 3-6 of claim 1]

A black correction part (a controller 36, fig. 4) includes a predetermined number of color data (a predetermined color patch 24, fig. 4, col. 6, line 20) and the effected of luminance under the ambient light 24 (fig. 4).

[recited in lines 7-9 of claim 1]

An image display means (the CRT display 22, fig. 4) includes the equation (1) generated adjusted single RGB signal values (solely black-corrected image data) for generating the adjusted single RGB or single R'G'B' signals (fig. 8, col. 8, lines 49-51) which are outputted to a CRT display monitor 22 (fig. 4).

[recited in lines 11-14 of claim 1]

A black-display characteristic specifying means (control knobs 38, fig. 4) adjusts certain display characteristics such as brightness, hue and saturation (col. 7, lines 1-2).

[recited in lines 15-21 of claim 1]

A black-approximated data calculating means (the equation (1)) generated adjusted RGB signal values (solely black-corrected image data) for generating the adjusted RGB or R'G'B' signals (fig. 8, col. 8, lines 49-51) which are outputted to a CRT display monitor 22 (fig. 4). The color patch 24 (fig. 4) consists of chromatic color samples, high saturation, low saturation, tri-stimulus XYS values (col. 6, lines 50-59), and the effected of luminance under the ambient light 24 (fig. 4, col. 7, lines 9-13).

[recited in lines 22-25 of claim 1]

The controller 36 is connected to a display monitor 22 and houses a central processing unit and a memory for storing data and profiles so as to control the display output 30 (fig. 4, col. 6, lines 36-39).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-20 and 22-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hino in view of Deguchi et al .

As to claims 2, 22, Hino teaches all of the claimed limitations of claim 1, except for a subtraction processing means.

Deguchi et al teaches a subtraction processing means subtracts the XYZ3-stimulus values from the three colors of RGB (see col. 27, lines 10-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hino's controller including a subtraction processing means, in view of the teaching in the Deguchi's reference because this would provide medium that are adapted to accurately carry out an operation of chromatic calibration with a minimal amount of data obtained by measurement as taught by Deguchi (col. 5, lines 48-50).

As to claims 3, 23, Deguchi teaches the subtraction data including RGB data only (see equation 48).

As to claims 4, 24, Deguchi teaches a subtraction processing means subtracts the XYZ3-stimulus values from the three colors of RGB (see col. 27, lines 10-14). Base on the equation (48) Xr,max –Xr,min (a limiter setting). Thus, the values after subtraction are greater than zero.

As to claims 5, 25, Deguchi teaches the equation (48) Xrmax –Xrmin (a limiter setting). Thus, the values after subtraction are greater than zero.

GOGO model (gain-offset-gamma-offset) using the tone data obtained by subtracting the measured values at the black level from the measured values for RGB in

a manner as described above (the values after subtraction is said black-corrected image data, col. 22, lines 4-6).

As to claims 6, 26, Deguchi et al teaches the black-approximated data with a multiplication factor of less than 1 (see column 13, lines 55-67).

As to claims 7, 27, Deguchi et al teaches the black-correction processing executing means including a look-up table data (see figure 17, column 28, line 26).

As to claims 8, 28, Deguchi et al teaches the black-display characteristic specifying data including ambient light information reflected by monitor surface (see figure 10).

As to claims 9, 10, 29, 30 Deguchi et al teach a difference between the luminance (Y), tristimulus (x,y,z) based on the black-approximated data and the luminance, tristimulus are equal to the specified value (see equation 58).

As to claims 11-15, 31-35, Deguchi et al teaches the brightness, the kind of an external light, and the color temperature, the luminance (Y) (see figure 10), the chromaticity value and the mixing ratio (h'r, h'g,h'b) that provides a reference white point for the maximal quantities of light of R, G and B (see figure column 13, lines 12-38).

As to claims 16, 36, Deguchi et al teaches the black-display characteristic specifying data including a characteristic, luminance, chromaticity and tristimulus in displaying black with the monitor surface (see figure 16).

As to claims 17, 18, 37, 38, Deguchi et al teaches a difference between the luminance (Y), tristimulus (x,y,z) based on the black-approximated data and the luminance, tristimulus are equal to the specified value (see equation 58).

As to claims 19, 20, 39, 40, Deguchi et al teaches the brightness, and the luminance (Y) (see figure 10), the chromaticity value and the mixing ratio (h'r, h'g,h'b) that provides a reference white point for the maximal quantities of light of R, G and B (see figure column 13, lines 12-38).

Response to Arguments

6. Applicant's arguments filed 06/25/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that claims 1 and 21 recite "an image display means performing an image display on a predetermined screen based solely on said black-corrected image data." This argument is not persuasive because Hino teaches an image display means (the CRT display 22, fig. 4) includes the equation (1) generated adjusted single RGB signal values (solely black-corrected image data as claimed) for generating the adjusted single RGB or single R'G'B' signals (fig. 8, col. 8, lines 49-51) which are outputted to a CRT display monitor 22 (fig. 4).

For these reasons, the rejections based on Hino have been maintained.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KN
November 1, 2004

XIAO WU
PRIMARY EXAMINE.